

CLAIMS

1. A reeling device for rolled material (BL) placed downstream of a rolling line, comprising at least one first guide element (1) and one second guide element (2), each of them defining a passage designed to support, contain and guide
5 said rolled material (BL), where the first guide element (1) is designed at least to rotate about an axis that is substantially normal to its own plane of lie and comprises one input end adapted to receive said rolled material coming off said rolling line, and one output end from which said rolled material may come out, and where the second guide element (2) comprises one input end, set in
10 the proximity of said output end of said first guide element (1), within which it is possible to introduce the rolled material that has come out of the first guide element (1), and one output end (8), from which said rolled material may come out towards winding means for winding the rolled material in turns, said winding means defining a winding axis (X), and in which said first guide
15 element (1) and said second guide element (2) are designed to vary their own inclination with respect to said winding axis (X) independently of one another at least according to a plane parallel to the axis (X).
2. The device according to Claim 1, wherein the winding means comprise a spindle (M) of a reel.
- 20 3. The device according to Claim 2, wherein there are provided means of orientation of the second guide element (2) so as to maintain the stretch of said rolled material coming out of said output end (8) of said second guide element (2) substantially with the same inclination as that of the last turn wound on said spindle according to a plane parallel to the winding axis (X) of said turns.
- 25 4. The device according to one or more preceding claims, wherein there are provided at least one first mobile support (10) and one second mobile support (11) designed to translate in the direction parallel to the winding axis (X), and said second guide element (2) is supported by said second mobile support (11) substantially in the proximity of or in a position corresponding to said output
30 end (8) thereof, and is supported by said first mobile support (10) substantially in the proximity of or in a position corresponding to said input end thereof, and said first guide element (1) is supported by said first mobile support (10)

substantially in the proximity of or in a position corresponding to said output end thereof.

5. The device according to Claim 4, wherein said second mobile support (11) is provided with means designed to raise and lower the second guide element (2).

5 6. The device according to one or more preceding claims, wherein there is provided: a device (12) for guiding the rolled material, comprising a space for passage, set downstream of said output end (8) of said second guide element (2) and designed to be traversed by said rolled material (BL); at least four rolls (120, 121), arranged in twos at both sides of said space for passage; at least
10 four rotating connecting rods (123), on each of which is fixed one of said rolls in such a way that said connecting rods by rotating are designed to move said rolls closer together and further away from one another at the sides of said rolled material when it passes through said space or gap; and control and actuation means designed to control and vary the position of said rolls (120,
15 121) at least in the horizontal direction so as to contain and guide laterally said rolled material.

7. The device according to Claim 6, wherein the device 12 comprises an idler roller (122), which has a function of guiding in a vertical direction the rolled material at output (8) from the second guide element (2).

20 8. A method for reeling rolled material with a device according to one or more of the preceding claims, comprising the operation of displacing the output end (8) of said second guide element (2) along said means for winding rolled material in turns, said means defining an axis (X) of winding, by causing the first guide element (1) to rotate at least about an axis substantially normal to its own plane
25 of lie and maintaining said second guide element with an inclination, according to a plane parallel to said axis (X), such that the stretch of rolled material coming out of said output end of said second guide element has an inclination, in said plane parallel to the axis (X) of the winding means, substantially equal to that of the last turn wound on said winding means.

30 9. The method according to Claim 8, wherein the first guide element is made to rotate at least about said axis substantially normal to its own plane of lie as long as said output end of said first guide element is within a region of space

substantially delimited by two end surfaces, each of which is orthogonal to the axis (X) of the winding means and passes in a position corresponding to one end of said winding means.

- 5 10. The method according to Claim 8, wherein it is envisaged to arrest said rotation of said first guide element (1) about said axis substantially normal to its own plane of lie when said output end of said first guide element (1) reaches one of said end surfaces (P1, P2), and wherein it is envisaged to cause said second guide element (2) to rotate subsequently about an axis substantially normal to its own plane of lie at least until the output end (8) of said second
- 10 guide element (2) substantially reaches one end of said winding means.
11. The method according to one or more Claims 8 to 10, wherein it is envisaged to raise said second guide element (2) during winding so as to follow the increase in diameter of the reel.
- 15 12. The method according to one or more Claims 8 to 11, wherein there is envisaged an operation of control of the position of the rolls of said guide device (12) for guiding the rolled material so as to maintain substantially a gap not less than a predetermined value between said rolls and the sides of said rolled material.